

ABSTRACT OF THE DISCLOSURE

5 A semiconductor device having an MODFET and at least one other device formed on one identical semiconductor substrate, in which an intrinsic region for the MODFET is formed by selective growth in a groove formed on a semiconductor substrate having an insulation film on the side wall of the groove, and single-crystal silicon at the bottom of the groove, is disclosed. The step between the MODFET and the at least one other device mounted together on one identical substrate can be thereby decreased, and each of the devices can be reduced in the size and integrated to a high degree, and the interconnection length can be shortened to reduce power consumption.